



### VDA600 Series

### 600 Watts

**600W SINGLE OUTPUT**  
**2:1 HIGH VOLTAGE INPUT**  
**ISOLATED & REGULATED**  
**SIX SIDE SHIELD**  
**HIGH EFFICIENCY**  
**HIGH DENSITY**  
**DIP PACKAGE STYLE**

- 2:1 Input Nominal  
 96VDC: 65~150VDC  
 110VDC: 82~180VDC  
 280VDC: 200~400VDC

- Efficiency up to 89%
- High Voltage Input
- Operating Temperature:  
 -45°C~+85°C (\*T)
- 500VDC & 1500VAC Isolation
- Over Voltage & Current Protection
- Remote ON/OFF Control
- Industry Standard Pin out
- RoHS



### Product Program

Part Number	Input		Output		Efficiency (% Typ)
	Voltage (VDC)		Voltage (VDC)	Current (mA)	
	Nominal	Range			
VDA600-96S24	96	65~150	24	25000	89
VDA600-96S28	96	65~150	28	21400	89
VDA600-96S48	96	65~150	48	12500	89
VDA600-110S24	110	82~180	24	25000	89
VDA600-110S28	110	82~180	28	21400	89
VDA600-110S48	110	82~180	48	12500	89
VDA600-280S24	280	200~400	24	25000	89
VDA600-280S28	280	200~400	28	21400	89
VDA600-280S48	280	200~400	48	12500	89

### ISOLATION SPECIFICATIONS

Item	Min	Units
Isolation voltage	500	VDC
	1500	VAC
Isolation resistance	10 <sup>9</sup>	Ω
Isolation capacitance	300	pF

## COMMON SPECIFICATION

Efficiency		See product program table
Switching frequency		300KHz
Approvals and standard		IEC60950-1, UL60950-1, EN60950-1
Case material		Non-conductive plastic
Base material		Aluminum base plate
Potting material		Epoxy (UL94-V0)
Dimensions		146X 86X 16 mm (5.75 X 3.39 X 0.63Inch)
Weight		135g (4.76oz)
MTBF	MIL – HDBK-217F2	5 x 10 <sup>5</sup> hrs

## OUTPUT SPECIFICATION

Output power		600 Watts
Voltage accuracy	Full load and nominal Vin	± 1%
Voltage adjustability		10%
Line regulation	LL to HL at Full Load	± 0.5%
Load regulation	10% to 100% FL	± 1%
Cross regulation	Asymmetrical load 25% / 100% FL	± 5%
Ripple and noise	20MHz bandwidth	1%
Temperature coefficient		±0.02% / °C, max
Transient response recovery time	25% load step change	400uS
Over current protection		120%
Output Voltage Adjustment		10%
Over load protection	% of FL at nominal input	120%,max
Short circuit protection		Hiccup, automatics recovery

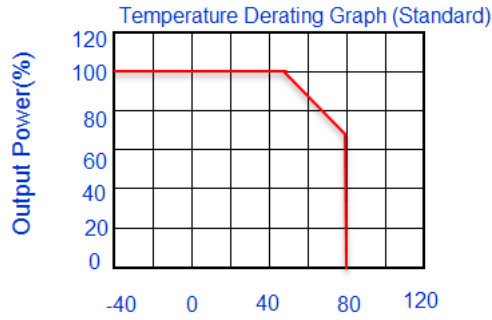
## INPUT SPECIFICATION

Input voltage range	2:1	96V 110V 280V	65~150 VDC 82~180 VDC 200~400 VDC
Startup time	Nominal Vin and	Power up	20mS typ
Remote control ON/OFF	On Off		Contact -Vin No contact (Or 12V-40V)

## ENVIRONMENTAL SPECIFICATIONS

Operating temperature range	Standard	-25°C ~ +55°C	
	T	-45°C ~ +85°C (with derating)	
Maximum case temperature	Standard	+85°C	
	T	+105°C	
Storage temperature range	Standard	-40°C ~ +105°C	
	T	-50°C ~ +105°C	
Vibration			10~55Hz, 5G,
Relative humidity			5% to 90% RH

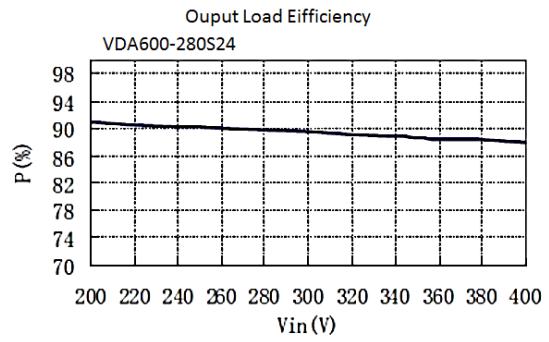
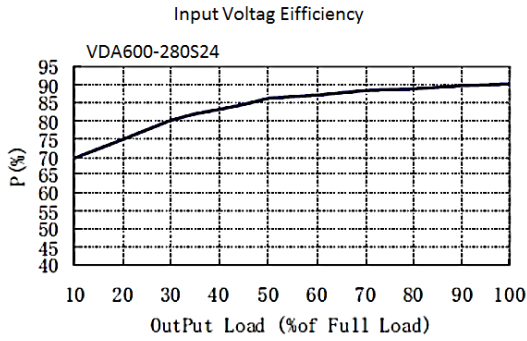
## TYPICAL CHARECTERISTICS



## FOOTPRINT DETAILS

PIN	1	2,3	4,5	6	7,8,9	10,11,12	13	14
SINGLE	CTL	-Vin	+Vin	+S	+Vout	-Vout	-S	TRM

## EFFICIENCY AND OUTPUT



## Recommended Circuit

